

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An apparatus-substrate assembly for placing a plurality of conductive spheres on a substrate, comprising:
a stencil plate with upper and lower surfaces, and a [first]pattern of a plurality of through-holes [extending across said stencil plate, and a second pattern having no through-holes,] said stencil plate configured to place said plurality of conductive spheres in said [first]pattern on a proximate surface of said substrate;
a hopper [extending across of said upper surface of said stencil plate and closely spaced therefrom to maintain control over all said spheres therein], said hopper having a bottom opening having a dimension extending across said first pattern for dispensing said spheres into said plurality of through-holes extending across said stencil plate, and being configured such that, as said hopper moves across said portion of said upper surface, only said spheres dropping into said plurality of through-holes escaping from said hopper; and
a positioning apparatus for moving said hopper over said [first]pattern relative said stencil plate to place said spheres into said plurality of through-holes and thereby onto said proximate surface of said substrate; and
a substrate having an upper surface, and bearing conductive sites comprising one of recessed sites and level sites with respect to said upper surface.

2. (Currently Amended) The apparatus-substrate assembly of claim 1, wherein said spheres drop into and pass downwardly through said through-holes by gravitational force.

3. (Currently Amended) The apparatus-substrate assembly of claim 1, wherein said [first]pattern corresponds to a pattern of bond pads on said substrate.

4. (Cancelled)

5. (Currently Amended) The apparatus-substrate assembly of claim 1, wherein the diameter of said through-holes of said [first]pattern are greater than the diameter of said spheres by up to 1 mm.

6. (Currently Amended) The apparatus-substrate assembly of claim 1, wherein said stencil plate is spaced from said substrate to restrain said spheres dropped onto said substrate within said [first]pattern.

7. (Currently Amended) The apparatus-substrate assembly of claim 1, wherein said stencil plate is spaced from said substrate to restrain said spheres dropped onto upwardly projecting prefluxed bond pads of said substrate.

8. (Currently Amended) The apparatus-substrate assembly of claim 1, wherein said stencil plate is spaced from said substrate to restrain said spheres dropped onto depressed bond pads of said substrate.

Claims 9-17. (Withdrawn)

18. (Currently Amended) An apparatus-substrate assembly for positioning a plurality of conductive spheres on a substrate, each conductive sphere of said plurality of conductive spheres having a diameter, said apparatus comprising:

a stencil plate having an upper surface, having a lower surface, having a [first]pattern of a plurality of through-holes [extending across said stencil plate, and a second pattern having no through-holes,]each through-hole having a diameter, said stencil plate configured to position said plurality of conductive spheres in said [first]pattern on a proximate surface of said substrate;

a hopper [extending across said upper surface of said stencil plate closely spaced therefrom to maintain control over all said spheres therein], said hopper having a bottom opening with

a dimension extending across said [first]pattern for dispensing said spheres into said plurality of through-holes of said [first]pattern of said stencil plate, and being configured such that, as said hopper moves across said portion of said upper surface, only said spheres dropping into said plurality of through-holes escaping from said hopper; and a positioning apparatus for moving said hopper over said [first]pattern relative of said stencil plate to position said spheres into said plurality of through-holes and thereby onto said proximate surface of said substrate; and
a substrate having an upper surface, and bearing conductive sites comprising one of recessed sites and level sites with respect to said upper surface.

19. (Currently Amended) The apparatus-substrate assembly of claim 18, wherein said spheres drop into and pass downwardly through said through-holes by gravitational force.

20. (Currently Amended) The apparatus-substrate assembly of claim 18, wherein said first pattern corresponds to a pattern of bond pads on said substrate.

21. (Canceled)

22. (Currently Amended) The apparatus-substrate assembly of claim 18, wherein the diameters of said through-holes of said first pattern are greater than the diameters of said plurality of spheres by up to 1 mm.

23. (Currently Amended) The apparatus-substrate assembly of claim 19, wherein said stencil plate is spaced from said substrate to restrain said spheres dropped onto said substrate within said first pattern.

24. (Currently Amended) The apparatus-substrate assembly of claim 20, wherein said stencil plate is spaced from said substrate to restrain said spheres dropped onto upwardly projecting prefluxed bond pads of said substrate.

25. (Currently Amended) The apparatus-substrate assembly of claim 20, wherein said stencil plate is spaced from said substrate to restrain said spheres dropped onto depressed bond pads of said substrate.

Claims 26 through 34. (Withdrawn)
